

LISTING OF CLAIMS

1. (Previously Presented) An intelligent power module comprising a power part of the electronic components of which are arranged on a power substrate, and a logic part of the components of which are arranged on a circuit board having a recess in which said power part is located and electrically connected to the logic part by means of wire bonding techniques, said power substrate being mounted on a cooling plate, wherein a first portion of said circuit board is mounted on and in thermal connection with the cooling plate, the first portion surrounding said power substrate and a second portion of said circuit board supporting at least one component forming said logic part which is not mounted on the cooling plate.
2. (Original) An intelligent power module according to claim 1, wherein at least a strip portion along a side of the circuit board is left free and is not mounted on said cooling plate.
3. (Previously Presented) An intelligent power module according to claim 1, wherein the circuit board has contact pads on said side by means of which the module can be soldered directly in the slot-like opening of a system circuit board.
4. (Original) An intelligent power module according to claim 1, wherein the components of the logic part are arranged on a multilayer circuit board having a recess in which said power part is located and electrically connected to said logic part, and characterized in that the multilayer circuit board has a laminate structure of conductively coated layers whose carrier material consists of a glass fiber resin fabric each, and in that the multilayer circuit board consists of two parts connected by a thin intermediate section in which all lower layers of the multilayer circuit board are not present and only the component-side uppermost layer is present as a bendable continuation in the form of a flexible, electrical and mechanical connecting layer between said two parts.
5. (Original) An intelligent power module according to claim 4, characterized in that the flexible connecting layer is bent by 180° so that said two parts continue in bendable manner.

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6. (Original) An intelligent power module according to claim 5, characterized in that the first part of the multilayer circuit board, which has the recess, as well as the second, folded up part are approximately of equal size, that said first part is mounted on a cooling plate that is larger than the power substrate area, and in that the electrical connections between said power substrate and the first part of the multilayer circuit board are established by means of wire bonding techniques.